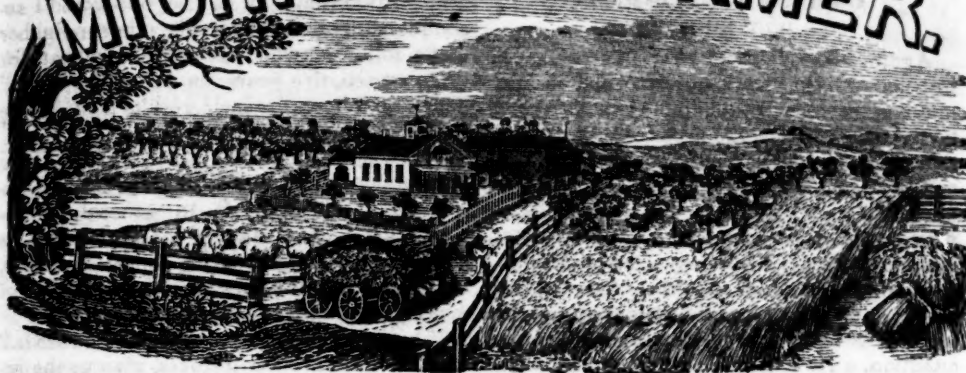


MICHIGAN FARMER.



DEVOTED TO
AGRICULTURE, HORTICULTURE, AND RURAL AND DOMESTIC ECONOMY.

Volume IV.

Jackson, September, 1846.

Number 6.

PUBLISHED MONTHLY.

H. HURLBUT, EDITOR.

[For Terms see last page.]

Special Request.

If each subscriber in arrears will prepare to forward us the amount of his indebtedness by the 1st of the ensuing month, he will greatly oblige us.

It will be recollected that we have offered to lose the postage on all remittances in bills. We continue the offer; but it is asking a little too much to expect us to do the same when the remittance is in coin. We sometimes receive a half dollar by mail, with 5 cents postage paid, leaving us to pay the other 5 cents.—This is unfair. If such persons would send the half dollar in the form of dimes they need incur but single postage, the weight being less. The best way, however, is to send a bill, and then we pay the postage. Receipts will be sent in the next number for all sums forwarded, except when the remittance is through resident agents, who are authorized to give receipts in our name.

Agents and Post Masters are requested to forward money at our risk and cost as soon as they receive the amount of \$1, so as to send it in a bill.

Some delay has been occasioned in the issue of this number by sickness in the Printing-Office.

Farmers, who are desirous of selling or of purchasing farms, or wild lands, are referred to the advertisement, "Land Agency," on our last page. We can assure our friends that all interests confided to our hands will receive faithful attention.

New Implement--a Bog-cutter.

A new invention has made its appearance, designed for smoothing the surface of marsh meadows. The instrument is in the shape of a harrow, consisting of two pieces of scantling coming to an acute angle in front, to the bottom of which are fastened steel plates, which project on each side about 3 inches beyond the frame work. These plates are brought to an edge, and, as the instrument passes along, shave off the tops of bogs with great ease, bringing the surface of the roughest marsh to a level. Handles are provided,

by which a man can regulate the motion as he would that of a plow, and to aid in this, and secure steadiness, a thin perpendicular iron plate penetrates the surface of the marsh, and serves to prevent any sidewise motion. In front of the cutter, and fastened to a projecting beam, is a small wheel, like that used on breaking up plows, which regulates the depth to which the instrument shall cut, while, to prevent the irregularity of operation which would be caused by the wheel passing over bogs, a miniature cutter, precisely like the large one before described, precedes it, leveling off a space wide enough for the wheel to follow in. If desired, the instrument can be so graduated as to pass just below the surface, skinning off the entire turf, and exposing throughout the black vegetable mold.

As the machine passes backward and forward across the meadow, the decapitated bogs are piled in windrows on each side, and are left in a good condition for carting to the barnyard to manufacture into rich manure—or if this involves too much labor, they may be drawn off and stacked on the nearest upland, where they may be left to decompose—or, if a season not too dry nor too wet be selected, they might be burned on the spot, and the ashes distributed.

We are free to say, we are pleased with the machine, and its operation, which may be seen in the neighborhood of this village. Farmers, interested in the matter, are referred to the advertisement of Mr. Freeman, on our last page, who, we understand, is the owner of the right for the state, with the exception of one county, Kalamazoo.

For the Michigan Farmer.

Commentator, No. 5.

JULY NUMBER.

Again, Mr. Editor, is your interesting and instructive little sheet before me, and on looking over its pages, I find, in the judicious selections of its articles, the practical communications of your correspondents, and pertinent remarks editorial, little remains for the reviewer to do as a critic;—but it must be remembered that I do not assume that character, but merely that of a humble "Commentator;" not claiming so much to teach, as to draw the attention of your readers to such articles and subjects as I conceive worthy of more special attention. How it is with you editors, whose trade it is to wield the pen, I know not; but to me it seems a difficult matter for a man to indite, or rather to produce, a sensible idea, when the atmosphere is hot enough to bake a man's brains, (if he is fortunate enough to have any,) the thermometer standing at 98° in doors. But to proceed in the business before me. I will first notice the article on the "EDUCATION OF FARMERS' DAUGHTERS."

I would commend this article to the special attention of each and all of your numerous readers. The facts there stated, and the illustrations given, are applicable to the families of hundreds of the farmers of our land. I regret to say that a vast amount of time and money expended in the education of young ladies at our female seminaries, so far as regards any practical usefulness in life, is worse than thrown away. A distaste for those duties, which many, if not all of them are called to perform in after life, is imbibed, which unfits them for their performance. Much has been said, and with propriety, about Agricultural Schools for the education of farmers' sons; and in order that both sexes may be fitted for the duties which devolve upon them in that calling, I would suggest the propriety of female departments being added to such schools, where farmers' daughters may be taught not only the solid sciences, but the improved system of domestic economy.

"DEEP PLOWING." In the article from the *Prairie Farmer*, the writer accomplished with the use of two plows, precisely what the "Michigan Subsoil Plow" is fitted to perform alone, and at once.

"MANAGEMENT OF A GOOD FARMER."—This article should be carefully read by every farmer, and although Mr. Geddes' mode of management might not be applicable to all, yet many useful hints might be obtained therefrom, beneficial to every one.

"MICHIGAN SUBSOIL OR TRENCH PLOW." I have used this plow, and concur in the remarks of Mr. Trowbridge. I have, however, not been so unfortunate as the neighbor of Mr.

T., who "spoiled his land for wheat" by making it "too rich" by its use, nor would I recommend the example of his other neighbor to be followed, who has "raised wheat for three consecutive years on the same field." Those who look for such results from its use must beware of "Humbugs."

"TRANSPLANTING LARGE TREES." The suggestions here are good, and as the first business of the "settler" is, in general, the indiscriminate destruction of all trees as far as he goes, and as fast as he can, on his premises, he should take the first and best method of making reparation by replacing them.

"AN EXPERIMENT IN WHEAT GROWING." That is right, brother farmers, give us the results of your experiments. It is the true way of obtaining and disseminating knowledge. I have no doubt that the precautions used by your correspondent D.; viz: early sowing and heavy seeding, were useful; but that they would be efficient under all circumstances, is hardly probable. Yet early sowing, say from the 25th Aug., to the 10th September, and two bushels of seed to the acre, would, I think, be beneficial. In sowing old seed, as recommended, more seed should be used than of new, as it will not all vegetate. An allowance, I think, of one-eighth, at least, should be made.

[In the single experiment which we have made in sowing wheat a year old, the result went to confirm the preference asserted by Von Thaer, in our July number, in the article, "Seed." We sowed thinly, about 5 pecks to the acre, and from the 6th to the 25th of September. The wheat stood quite as thick on the ground as we ever had it from new seed of the same quantity and plumpness, while the yield was superior to the average. From that fact, we were led to the conclusion that plump, well-ripened wheat, kept dry through the year, loses none of its vegetative powers in that length of time.—Ed.]

"HOW CAN WE GET RID OF SORREL?"—Aye, there's the question; how can we get rid of it? Any one who can give the cheapest and surest mode of extirpating this pest of the farmer, will render an essential service to his country. The best modes which I have seen practiced are, 1st. Stocking heavily to clover, (if you can keep the sorrel under long enough to give the clover a start,) with the use of plaster. 2d. Deep and thorough plowing in mid-summer. For I am of the opinion that no kind of plowing, however deep or thorough, in the spring, will effect the purpose. The roots at that season are seeded,* and plowing at that time tends only to extend the evil. I would be glad if any of your readers who have made any successful experiments in its destruction would give them to the public.

* Not furnished with seed, strictly so called, but with small tubers or granules resembling seed, from which new plants spring.—Ed.

"MANURING BY GREEN CROPS." As you truly observe, a right decision of the question is important. It is true, the instances given in the July No. were strong arguments against turning in green crops; but it would require a continued series of well attested experiments, all tending to the *same results*, to convince me that such would be universally the case. To me, the arguments used by Prof. Johnson seem conclusive. Although I cannot speak from experience, yet it appears reasonable that by turning under a green crop its decomposition not only adds to the amount of vegetable mould contained in the soil, but supplies the alkalies that would be found in their ashes. That the soil should become richer by this burial of a crop, than it was before its growth, will be understood by recollecting that a great portion of the whole organic matter we bury has been derived from the air: that by this process of plowing in, the vegetable matter is more equally diffused through the whole soil, and therefore the more easily and rapidly decomposed; and it is held also, that by its gradual decomposition ammonia and nitric acid are generated. It would be a very gratifying fact, if it can be proved to be a fact, that the land will be as good, and the crop better, by cutting and taking off a crop of clover, than it would be by turning it under; as thereby a crop of hay would be saved. But I am inclined to think that course more properly belongs to the skinning system. J. F. C.

Kent Co., Mich., 15th Aug., 1846.

For the Michigan Farmer.

Kalamazoo Co. Ag. Society--Harvesting Machine and Gang Plow.

H. HURLBUT, Esq.,—

I received your note in due time. Having been unusually engaged during the season, by farming largely, with none but young operative to assist, and not being a practical writer for public prints, it becomes quite a task; yet as you suggest, it is the true method for farmers to communicate with each other by the aid of agricultural papers.

We have formed, in this county, a County Agricultural Society, according to the provisions of the statute. Our first meeting was held at Schoolcraft, Prairie Ronde, on the 15th January last, at which time officers for the Society were chosen, consisting of a President, a Vice President in each township in the county, a Treasurer, a Corresponding Secretary and a Recording Secretary, which together constitute the Executive Committee for said Society. We have since held meetings, and have made out a list of premiums to be awarded to competitors at our annual fair, to be held at Kalamazoo on the 7th and 8th days

of October next; which list I herewith send you.

I have finished harvesting with a harvesting machine, which is the invention of Hiram Moore, Esq., of this county, and have cut over 300 acres. This machine cuts, threshes, cleans and puts into bags, by the aid of machinery alone, drawn by 16 horses. We cut about 20 acres per day. The cut is 10 feet wide, and horses travel at the rate of 2 1-2 miles per hour. I have also in use a pair of plows for plowing or breaking fallow, drawn by 4 horses, by which my son, 12 years of age, plows 4 acres per day: also, I have now in use a gang of four plows, for cross plowing summer fallow, or plowing in wheat. These plows turn 9 inches each, and are drawn by 2 horses, so that one pair of horses and one driver do the work of 6 horses and 3 drivers. This is the invention of Mr. Nathan Baker, of Flowerfield, St. Joseph Co. They will be exhibited at our Agricultural Fair this fall, at Kalamazoo.

I should be happy if you could make it convenient to attend our fair, and become personally acquainted. Our wheat crop is not a good one—very much shrunk by the operation of the rust. Corn will not be heavy, oats light, and potatoes must be light. We have had a severe drought.

Sir, you will make use of the above information in any way you think best; and if I can at any time give you any original ideas of my own or others, beneficial to the farming interest, I shall feel happy to do so.

Respectfully yours, &c.,

ANDREW Y. MOORE.

Schoolcraft, Aug. 16th, 1846.

[It gives us pleasure to publish the above from the President of, we believe, with one or two exceptions, the only active County Agricultural Society in the State, and it would afford further gratification to be able to make some personal acquaintance with the farmers of Kalamazoo; for our subscription list assures us that we have many friends there. We could wish that they would not confine their public spirit to their own county, but would be more communicative through our columns with the state at large.

According to the Show-Bill, accompanying the letter, it appears that the sum of \$240 is to be awarded in premiums on the different kinds of crops, on domestic animals, and household products; and \$21 to the competitors in the plowing matches. Of these last there are to be two: one on Openings soil, and one on Prairie soil. We hope the various prizes in each department will be contested with products that will do honor to the county; and of these we should regard as not least in importance the department of household products;—those emphatically home manufactures which tend to make the western farmer independent within himself.

We should be happy to learn whether the Har-

vesting Machine and Gang-Plow above mentioned, have been found, on comparison, to be superior, respectively, to Esterley's Patent Harvesting Machine, and Wiard's Gang Plow, engravings of which were published in our last volume.—Ed. FARMER.]

For the Michigan Farmer.

To remove Worms from Trees.

MR. EDITOR :—

I was lately in conversation with a respectable farmer, who related the following instance of successful treatment of trees infested with worms. He bored with a nail gimlet near the root of the tree a hole about an inch deep, into which he introduced about as much calomel as could be lifted on a quarter of an inch of the point of a penknife, and plugged it up tight with a plug made of a green branch of the tree. In 48 hours the worms were all killed. The trees were from 2½ to 4 inches in diameter.

This mode of getting rid of insects, by treating them with salivation, may strike some as partaking of the marvellous; but the source from which I had it, leaves me no doubt of the fact. N. H.

TO EXPEL THE YELLOW STRIPED BUG FROM MELON, CUCUMBER, &c., VINES.—Take equal quantities of Cayenne Pepper and Lobelia, well pulverized and thoroughly mixed, and sprinkle them on the plants when wet with dew, or wet for the occasion, and the bugs will immediately decamp for more agreeable quarters.

If my former prescription smacked of the "Pothecary shop," the latter will be seen to accord with the "Botanic" practice.

N. H.

For the Michigan Farmer.

Inquiries and Suggestions.

MR. HURLBUT :—

Allow me to make the enquiry through your paper as to the best mode of preserving cranberries fresh for the greatest length of time. If some of your numerous subscribers will give us their experience, they will much oblige one at least. While making enquiries, let me ask whether the steeping of corn in different solutions, as recommended through different sources, has, or has not proved beneficial to the crop as a whole? what was the steep used? &c., with such remarks thereon as might seem useful. I make the enquiry now, while the experiment is fresh in their minds, and the result of them before their eyes. The result of my experiment, and my opinions on the same will be reserved for a future number.

In regard to the melon and fruit blight, I

would recommend to the sufferer kindness and liberality.

"To be resigned when ills befall:"—

And to the insects, patience :—

"Patient when favors are denied,
And pleased with favors given."

The wheat crop was very good. Spring crops are suffering much from the present drouth. A. M. C.

Variety Grove, Ingham Co., }
15th of 8th Mo., 1846. }

Farming and Science.

In Dr. Johnson's admirable little story of "Rasselas," Imlac makes a long digression in order to recount to the Prince all the various things which a man ought to know who aspires to the name of a poet. Before he has half done, the prince interrupts him with the exclamation, "enough! thou hast persuaded me that no man can be a poet! Proceed with thy narration."

The bare mention of the sciences with which the agriculturist is expected now-a-days to be familiar, reminds one of this passage, and tempts him to exclaim with the impatient Rasselas, "enough! no man can be a farmer. Let's change the subject."

So much for theory; how is it with practice? A tenant dies or leaves his farm, or hints that there is a possibility he may leave it. No matter whether the said farm be large or small, good or bad, sand or clay, within one month, the landlord's residence is in a state of seige, and his table groans under a feast of letters; he is pelted with applications. Now, imagine for a moment all the motley host of applicants for the vacant or vacable farm collected together, and the landlord, after eying the noun of multitude before him, all answering to the name of "farmer"—imagine him, with a painfully suppressed fit of inward laughter, addressing them in the following words: "Now, I will let the farm rent-free to the man among you who shall tell me the meaning of the following words; chemistry, geology, vegetable physiology, botany, mechanics, hydraulics, hydrostatics, geometry, meteorology, anatomy, animal physiology, natural philosophy, oxygen, nitrogen, hydrogen, carbon, ammonia, soda, potash, phosphorus, sulphur, alumina, silica, calcareous, ferruginous, centre of gravity, line of traction, angle of forty-five, percolation, filtration, capillary attraction, solution, precipitation—There, I am out of breath. I have only told you half. You look amazed, and are all laughing; but it is *I who ought to laugh at you*; for every one of you that has made application for this farm, virtually undertakes to solve partially the most difficult and mysterious problems that the human mind can perform; and the man that

takes it *will do so*, and every man that holds a farm and cultivates it *does do so* every year of his life—in every one of the sciences and subjects of which I have merely given you the proper names!”

And such is literally and honestly the fact. The list is long and the names are hard. But we may know a man's character well, and he may have done us a good service many a year, and yet it is perfectly possible that we may be ignorant of his name; and so it is with the sciences and subjects that belong to agriculture. Of all the practical pursuits in which the mind of man can be engaged, it is the one which requires the most extended knowledge of, and derives the most advantage from an acquaintance with what are called the physical sciences, meaning the knowledge of natural causes and effects in the matters of earth, air, water, fire, plant and animal.

But if it makes this demand upon the capacity of man, with what does it repay him?—With the highest, the truest, the best of all earthly blessings—health to the body, satisfaction to the feelings, and occupation to the mind. And to these present boons there is added another, less obvious and tangible, but singularly and beneficently adapted to the imperfection of man's earthly state, viz; an interesting and alluring *anticipation of the future*, which, hiding the gray hair, masking the deepened wrinkle, and soothing the recent woe, gently leads him on from year to year, till the allotted span has already past, the goal imperceptibly won, and the earth, which his mind has studied, and his strength has tilled, receives him in her gentle bosom, and, whilst he sleeps in peace, “the good that he has done lives alter him.”

“Very pretty, indeed—highly pleasing and poetical,” you will say; “but if one may venture an opinion drawn from common remark and daily experience your farmer is, of all mankind, the most uninformed of all these scientific susceptibilities and dependencies of his art, and the least sensible of all those moral and physical advantages that you flourish about. If the pursuit be really such as you describe, how comes it that in this same six thousand and fifty-something year since Adam found the soil, and nineteen or twentieth since Mr. Deanston Smith *discovered the sub-soil*, that farming is still lost in the dim back-ground of civilization; a mark for every passer-by to have a shy at? Surely, there must be some mistake! We cannot be talking about the same thing! If agriculture be, as you say, (and as Pliny and Virgil, and Dr. Johnson, and Mr. Pusey, said before you,) the *oldest*, the *noblest*, and the *best* of all human pursuits, surely *agriculture* and *farming* must mean different things, for sure, the *oldest* practice

must be the most *perfect*.”

The answer is by no means obvious; but strange as it may seem, it will be found, on examination, that the advancement of the arts is exactly in an inverted ratio with their antiquity. The cotton trade is far before the old silk trade, and the silk before the still more ancient wool trade. In a word, the more the human mind is advanced, previous to the discovery and practice of any particular art or trade, the more suddenly does that trade leap into perfection; because it *has no established prejudices to contend with*. Those two inveterate hags, prejudice and (mistaken) self-interest, strangle every babe that is too big for their swaddling clothes, and woe to the *giant* that is born within the rounds of their midwifery! The fair and noble proportions of science appeal in vain against their accursed partiality for the perpetuation of original deformity and dwarfship. And where is the ancient art in which these beldames are not still in the possession of a lingering practice? Is it not become a proverb that the old professors are the fierce opponents of a new discovery? Who imprisoned Galileo? The monkish monopolists of science and knowledge. Who persecuted Caxton? The transcribers of manuscripts. Who denounced Luther? The priests of the old faith. Who jeered at Harvey's discovery of the arterial circulation?—The physicians of the day. Who called Lord Stanhope a madman for putting steam engines into a ship? A committee of naval captains. Who ridiculed railroads? The old coach proprietors. Who laughed at the man that first stocked away the useless hedgerows, grubbed up the trees, deep plowed and deep drained the land, and spared no expense in the application of every modern appliance to the farmery? The surrounding farmers.

In a word, then, once again, why do the modern arts beat the old ones? Because they alight upon “a fair field and no favor,” where the struggling but tender infancy of human ingenuity and enterprise is not blasted by the chilling breath of established ignorance and baleful prejudice, nor harrassed by the poisoned stings of vulgar ridicule.—C. W. H., in *London Agricultural Gazette*.

The Preservation of Roofs.

A WRITER in the Boston Cultivator, referring to wooden roofs and their rapid decay, gives the following cheap and simple method of preserving them for many years. He observes, “A friend of mine, who unites much close observation with large experience in building, states that the best preservative of shingles that has come within his knowledge, is to soak them in an alkaline solution of quick lime before they are put on. The plan

adopted by him for the purpose, is to prepare a box in which to dissolve the lime, similar to that used by plasterers, and have it elevated, so as to permit the lime water to be drawn from it, into another box in which the shingles are to be placed that are intended to be impregnated with the alkaline solution. A sufficient quantity of quick lime is put in the upper box, which is slacked and reduced to a thin wash, and well stirred up, when it is permitted to settle.

The shingles are set on end, with their butts down, in the lower box, which is sufficiently deep to permit the parts which will be exposed to the weather when they are put on in courses, to become soaked, by drawing down the alkaline lime water from the upper box into the one below in which they are placed. They should remain in this solution for some hours, when they are removed and suffered to dry, and others substituted in the box to undergo the same operation before they are nailed on the lath.

"No part of white wash or lime should be permitted to pass into the lower box; it being to pass into the lower box; it being the caustic alkaline solution of the lime only, which is beneficial; it is a powerful antiseptic, interposing powerful obstacles to the decay of wood or vegetable matter of any kind. The presence of the insoluble particles of the lime would tend to prevent the entrance of the transparent solution.

"The tendency of white wash to preserve wood from rotting, is universally acknowledged, but it should be borne in mind, that it is the alkaline solution of the lime only, which has this tendency, and that the gross, insoluble particles of the lime which remain for a time in the form of a scale on the surface to which it has been applied, has nothing to do with its antiseptic powers, and that where the design of its application is to preserve the wood only, it would better accomplish the object by being much more diluted than it generally is, so that the alkaline quality would be more thoroughly absorbed than is usually the case. It is a very curious and interesting fact, that water at the freezing point dissolves twice as much of the alkaline ingredient of lime as boiling water does, so that the use of hot water to dissolve lime is worse than useless."

Selection of Seed Corn.

DEAR SIR:—As the time approaches when the corn crop should be gathered, I wish to suggest to each farmer who reads your paper, and through them to every neighbor of their's who may not read it, the necessity and advantage of selecting seed corn in the fall as they gather their crops of that great staple of our country. I wrote to our friend, Mr. Skin-

ner, a long letter on this subject some twenty odd years ago, which was published in his *American Farmer*, and soon thereafter distributed to many, some of my seed corn, the increased product of which all acknowledged, and some of them profited considerably no doubt, by the suggestions; and selling their seed corn at high prices (Mr. Baden, for instance;) and some five or six years ago, I again wrote a short note, also published in the same paper. To the many who never saw those letters, who now read your paper, I would advise, that in cutting the tops off their corn this fall, to leave the top on those stalks having two or three fine ears, and which are very forward, and shuck or husks dry and white, thereby showing their forwardness. By the top, they can easily distinguish at gathering time the seed corn and gather and house it to itself, and not take the shuck off until planting time in the spring, keeping it until then secure from rats and vermin. And by continuing this process a few years, they will materially increase their corn crops, with so little trouble that no practical farmer should fail to try it.

I have never known one to try it, who did not acknowledge its benefits and increased yield of corn. Several have lately rode through my corn crop, and every one expressed their great surprise at seeing vastly more stalks with four or five large ears on each, than they ever saw before, and not one in many dozen without two or three fine ears on them. I ask all to try it a few years, and if not pleased with the result, to discontinue it. By this process they materially increase the product and increase its forwardness. I am fully satisfied from long experience of the great advantage of reserving the best of many of our products for seed, and letting them grow fully ripe before harvesting; and earnestly recommend the same to all cultivators of the soil. In haste, your obt. ser't, &c.

Ame. Far.

WM. COOK.

For the Michigan Farmer.

Charcoal in Cider.

MR. EDITOR:—

You may remember that last year I told you that cider might be entirely preserved from fermentation, if about a pint per barrel of pulverised charcoal be introduced in a long narrow bag through the bung. I believe I forgot to say, however, that in the experiment I made, there was left no vent at all. The bag of charcoal was put in, and the barrel bunged up tight, within two hours after the cider came from the press, and so remained. The cider continued entirely fresh, became clear, and grew better the longer it was kept, which was more than six months.

N. H.

To kill Insects in the Roots of Trees.**MR. HURLBUT:—**

In the last numbers of the Michigan Farmer, last page, a "Young Nurseryman" requests information as to the most effectual manner of destroying insects working at the root of young trees. It may perhaps be of use to mention an instance of successful treatment which once occurred to my knowledge. An English Cherry tree, nearly eight inches in diameter, was apparently declining fast, when it was ascertained that insects were at work at the root. A recommendation to dig around the root, and apply boiling or scalding water was put in practice, with the effect of restoring the tree to perfect health. Although boiling water would seem a rather severe remedy, yet it appears only to give new life to the bark, and produces new action and restoration to health.

Yours truly,

L. B.

Highland, August 10th, 1846.

[We cannot speak advisedly of the application above recommended; but should think caution necessary in making it. The good effect experienced in the case mentioned, we apprehend, was owing rather to the destruction of the insects, than to any particular sanative effect from the boiling water.—Ed.]

New Variety of Wheat

FOR SOWING LATE.

Some years since Mr. Bateham imported from France a species of Wheat called the *Early White Provence*. It is a very large and beautiful white shirred berry, and makes the first best flour. Gen. Harmon commenced experimenting with it, but after several years trial abandoned it—finding it to push out very early, and with a tendency to fall down and crinkle. He gave a quantity of the seed to Mr. Wolcott of Bloomfield, who accidentally sowed it after corn, quite late, and found it to do well—ripening at the same time with the White Flint, and producing over 40 bushels per acre. This process he has continued since for several years—once sowing during a January thaw, with the same result; at any rate never having less than 40 bushels to the acre, and sometimes more. L. B. Langworthy of Greece, and Thomas H. Hyatt of Rochester, have each 6 bushels, and Gen. Harmon of Wheatland, 12 bushels sown, from which if the result is favorable, those who have a well manured corn field, which they may wish to make a cheap wheat crop from, can we presume procure seed enough to try the experiment.

It is sometimes very desirable to follow corn or potatoes with wheat, but from the lateness of the season our Flint and other favorite wheats are apt to be so far behind in ri-

pening as to rust and be lost; and if a variety is discovered that may be sown late, and yet ripen before the heats of July destroy it, it is a great desideratum, and worthy of being looked after.—*Genesee Farmer*.

¶ A farmer who has raised the White Provence wheat in this county for four years past, confirms the statement above made in regard to its valuable property of producing well with late sowing. He has sown it as early as the 1st of September, and as late as the 1st of October, and found the latter do as well as the former. It springs up and tillers out with great rapidity, covering the ground sooner with less seed than any other variety with which our informant is acquainted. He has not experienced here the objection met with by Gen. Harmon, that of a tendency to fall down and crinkle. It stands as well as any wheat.

In the town of Hanover, in this county, it has been raised the present season by several farmers, with all of whom it has entirely escaped the rust, and has produced a plump, handsome berry. It has been grown where it could be compared with the Red Chaff Bald, the Improved White Flint, and the Hutchinson varieties, and has proved itself superior to either. The Hutchinson has been next in excellence.

For the convenience of any that may wish to procure the seed of the Provence, we have ascertained that it may be had of Reuben Heath, of Hanover.—Ed. MICH. FARMER.

Dusty Hay.

The Maine Farmer asks, (see p. 223 of the present vol. of the Farmer and Gardener) what causes dusty hay; and cites the opinion of the Massachusetts Plowman, of a writer in it, and of some others. This subject arrested my attention years ago, in consequence of finding hay, which was put into my stable without any annoyance from dust, becoming exceedingly dusty afterward. I did not attribute this condition of the hay to a "tight barn;" for mine was neither "shingled" nor "clapboarded;" and the windows were always open. But from the fact that the hay was not dusty when placed in the loft; but became so in the mow, I inferred that the hay, like books, clothes, furniture, and every animal and vegetable substance, however dry when put away, had contracted mold.* On examining my hay, I was confirmed in this conclusion; and have remained satisfied with it ever since. Mold is a vegetable, consisting in this case of a stipe or stem, bearing on its summit a little globular box of minute seed which, when ripe, escapes by the slightest jar, in the form of dust, like that of the puff-ball; and in both cases it is sometimes called "smoke." Any farmer who has good eyes or a suitable glass, can determine the truthfulness of this opinion for himself by a careful examination of his dusty hay.

J. T. P.

* Webster's orthography.

MICHIGAN FARMER.

JACKSON, SEPTEMBER, 1846.

REMARKS ON THE CULTURE OF THE GRAPE, AND THE MANUFACTURE OF WINE, in the *Western States*, comprised in a report made by direction of the Cincinnati Horticultural Society, May 2, 1846. By Melzee Flagg, M. D.

Such is the title of a very neat pamphlet which has reached us from some unknown source, containing interesting matter to those engaged in the culture of the grape. From a statistical table contained in this pamphlet, it appears that there were, last year, in Hamilton Co., Ohio, 83 vineyards, containing about 250 acres; 114 being in bearing, from which were made 23,219 gallons of wine. This season about 100 acres of vines more have been planted, making, in all, in that county, 350 acres. The average yield of wine per acre, for five years in succession, with proper care and attention, may, it is stated, be safely calculated at 450 to 500 gallons.

For wine making, the Catawba grape appears to be preferred by the most competent judges, to any other, whether native or foreign. It produces a wine which has been pronounced by connoisseurs equal and very similar to good imported Hock; it also makes, under proper management, a good article of Champagne. One hundred bottles of American Champagne from this grape, have lately been sold for \$125. The more common qualities of American wine sell at from \$1.00 to \$1.50 per gallon.

THE SCIENTIFIC AMERICAN.—This paper, after long absenting itself from our sanctum, has again made its appearance, with a "Please Ex." on it. This we willingly do, for, aside from our agricultural exchanges, this is one of the most interesting weeklies we meet with. Every mechanic, and all who are interested in the numerous inventions in the arts that are every year made, will find themselves well paid in taking the paper. As we are desirous of keeping a file of it, will the editor see that we have it regularly hereafter.

THE FIELD ENGINE; *A machine for harrowing, sowing and rolling at the same time.* Such is the name given to an instrument described in the Scientific American, which appears to us to be the "*ne plus ultra*" [we hope J. F. C. will forgive the Latin] of inventions for getting in grain. It consists of a roller, 8 feet long and 3 in diameter, enclosed in the back part of a square horizontal frame. To the forward part of this frame, a tongue, or pair of arms are attached, by

which the machine is drawn forward; and are so adjusted as to hold the frame in a horizontal position. Four pieces of stout plank extend across from side to side of this frame, and are supported by pivots at each end. To the forward side of each plank is attached a row of triangular teeth, which extend downward so as to furrow the earth in their progress. The teeth in each row are placed about six inches apart, and those of the second row are so adjusted as to cut the ridges formed by the first,—and the 3d and 4th rows are arranged like the 1st and 2d. A small cylinder is mounted over the space between the second and third planks, or harrow-bars, and is connected by a band to a grooved circle on the end of the roller cylinder; so that when in motion this small cylinder is put in motion rotarily. This is termed the *sowing* cylinder, and contains several small cavities, which are filled with grain from a hopper placed over it. The grain is, of course, sowed between the second and third rows of teeth, by which it is thoroughly imbedded, and the earth is smoothed by the roller cylinder. Thus the operations of harrowing before sowing, sowing, harrowing in, and rolling the ground, are performed at once, by a single team, and a man seated comfortably in a chair elevated over the roller. Such is the plan; a working model has been constructed, and no doubt is entertained of its complete success.

FRUIT IN MICHIGAN.—The unbought luxuries which hang in abundance from the trees in many a fruit-yard and orchard, and the grateful supply which fills the markets of city and village, are most satisfactory after the long abstinence which many have known from unfavorable seasons, and the unavoidable deprivations of a new country. The quality of the fruit is such, as to place Michigan, in that respect, among the first fruit-growing States of the Union. Peaches, especially, considering that they are almost exclusively seedlings, do wonders,—showing what delicious fruit might be raised, by budding with the choicest varieties. If farmers were aware how simple a process budding is, and how speedily and safely they might have their trees loaded with the most delicious fruit known, they would not be willing to take their chance for any that might happen to spring from a peach-stone. It is true that seedling peaches are apt to resemble more or less the parent tree, especially when that does not stand near any of a different kind;—but it is a general remark among horticulturists, that the more choice the variety, and the farther removed by cultivation from the wild state, the less the probability of obtaining, from the seed, its like.

Speaking of peaches, reminds us that there are some pleasant things in the lot of an editor: at least we think so, whenever the perquisites reach us, as they do occasionally, in the shape of melting, delicious rarities.

Quince, a fruit as rare as it is valuable, are this season to be met with of large dimensions. We measured one a few days since, growing in the garden of Mr. Holbrook, of this village, which was upwards of 10½ inches in circumference. Who beats this?

LUCERNE.—Last spring, we mentioned that we had procured some of the seed of this plant, and had committed it to a French farmer, accustomed to its culture in his native country. He recently informed us that he sowed a small portion, and has found it do as well as could be expected considering the late time of sowing, (May 25th,) and the character of the season since. After it had attained the height of about 10 inches, he cut it off, and in a fortnight it had grown as high as before. The cutting, he thought, improved it. He is confident its culture will be successful here. Not much is to be expected of it the first season, even when sown early in April, as it should be. It is said to improve in productiveness for five years. It lasts ten, and with good usage fifteen years.

We reserved a few seeds to sow in a garden bed. The exceedingly hot and dry season affected it rather severely, and we must say that every weed that sprang up among it, if permitted to grow, could have far outstripped it. The first season, it evidently needs a protecting hand and careful culture to keep the ground clear, and give it a fair chance; and this is probably the principal reason that it is so little cultivated. Subsequently, after it has had time to send down its long roots into the subsoil, the passage of a sharp light harrow over it as soon as spring opens, to eradicate the weeds, is nearly all the attention it requires.

Getting in Wheat.

No part of the business of the western farmer is more important than the preparation and seeding of the wheat crop, inasmuch as upon the skillful manner in which this work is performed, depends the yield of the great staple of the country. A few suggestions on this subject, derived for the most part from the experience and practice of some of the most successful wheat-growers, may not be without their use at this season.

PREPARATION OF THE SOIL. This point has already been mainly attended to, except perhaps the last plowing. Where the soil is of great rich-

ness, it is desirable that it should have been preceded by some crop which by abstracting a portion of this exuberant fertility, will cause the wheat crop to be characterized by a diminished growth of straw. Thus the danger of injury by rust, is in part obviated. For this purpose, flax has been recommended as a fallow crop to precede wheat on the richest soils. Corn, peas, and beans, are also used for the same purpose. By pursuing this course, a profitable summer crop is secured, while, at the same time, in the case supposed, a greater certainty is secured of a good crop of wheat. On meagre soils, or those of medium richness, there is less need of the fallow crop, and here a clover lay is one of the very best preparations. A summer-fallow, or clover pasture, manured during the summer by sheep, is calculated to produce a crop of superior quality; since, according to Von Thier, wheat, grown on lands so manured, always contains a very large proportion of gluten, which causes it to make the best flour and bread.

As a general rule, the practice of sowing wheat after wheat, or any of the small grains, oats, rye, &c., is one that does not meet the approval of the experienced wheat-grower. Although good crops may sometimes be so raised, on lands abounding in the materials of those grains, yet the course is an exhausting one, and obtains little countenance from the principles of a correct rotation. According to these principles, wheat should follow rather the broad leaved crops, which extract for their growth very different substances.

KINDS OF SEED.—The red chaff bald wheat, which has been long the favorite variety with many, has the present season compared so unfavorably with some others, and is withal so subject to injury, that although producing now and then splendidly when all circumstances are exactly favorable, it is, we think, fast losing its popularity. Many, who have heretofore used it exclusively, will this year substitute, in whole or in part, some other sorts. All things considered, we believe the best varieties known among us are the Improved White Flint, the Hutchinson, and the Early White Providence. The Hutchinson is a bearded wheat, the others bald.

PREPARATION OF SEED.—Although we believe there would be little danger of smut from sowing in ground in suitable condition any seed which had been suffered to ripen thoroughly before cutting, and been kept dry and in good condition subsequently, yet as these conditions do not always exist, and as, at all events, the use of the substances which have been at various times recommended for seed wheat, as preventives of that disease

would tend to produce a quick germination and vigorous growth, it would be advisable to adopt one of the methods referred to. And we would suggest that experiments be made with different modes of preparation, so as to give their respective merits a fair trial.

The idea that shrunk wheat will do as well as any for seed, is an injurious error. It is not denied that on excellent wheat soils, and in favorable seasons, good crops may have been grown from shrunk seed:—but such instances prove nothing unless comparisons have been instituted, between wheat grown from plump and shrunken seed, under the same circumstances. It may be affirmed with confidence, that the plumper and more perfect the seed, the more vigorous and healthy will be the plant. No principle in Agriculture is better settled than this. Hence the pains taken by the best wheat-growers to select the heaviest kernels. This is especially important this year, when the crop is generally imperfect. If a poor sample of wheat must be used for seed, much pains should be taken to run it through the fanning mill, turning rapidly, so as to throw over a large proportion—thus securing the heaviest for seed. The same process will free the seed from chaff, which, if sown, will obey the general law, and produce its like—a most unprofitable species of production too.

TIME OF SOWING.—Now that the dreaded Hessian Fly appears to have left the State on a visit to the fields of Western New York and other sections, the time of sowing may be regulated without much reference to its habits—though still, lest the enemy may be lurking among us, it is well not to tempt him, by sowing excessively early. The best time for most varieties is between the 1st and 15th of September. Wheat of any variety with which we are acquainted, except the White Provence, is an unsafe crop, if sown after this month: indeed, we should never wish to sow after the 20th.

QUANTITY OF SEED.—This is one of the points upon which the diversity of opinion among farmers is widest: the practice among us varying from 3 pecks to 2 bushels per acre; and in Europe from 5 pecks to 3 and even 4 bushels. Could the seed be distributed with perfect regularity and be sown early, it would seem from the number of kernels said to be contained in a bushel, that half a bushel per acre, would, for most soils, be sufficient. Those who use a sowing machine may probably find twice that quantity ordinarily to answer. But with common broadcast sowing, more seems required: from 5 to 6 pecks appears to be the average quantity used, modified according as

the sowing is earlier or later.

The editor of the *British American Cultivator*, who appears to be a very judicious practical farmer, after trying the experiment of sowing in drills a field with only 3 pecks to the acre, recants from the theory of the thin sowing of grain, as not equalling what its advocates had said of it. The yield in straw he found most abundant, and the heads uniformly large; but the great space the plants had to tiller prevented its ripening as early as it otherwise would have done by at least a week, and the yield, he thinks was less than it would have been with more seed. He says the most successful wheat-grower of whom he has any knowledge, sows $2\frac{1}{2}$ bushels to the acre, and calculates each plant shall only produce three ears.

Does the comparative richness of the soil affect the quantity of seed required? and if so, which demands most, a thin or fertile soil? The opinion is somewhat prevalent that a thin soil requires most seed—for, it is argued, in such a soil wheat will tiller but little, and seed enough must be applied to supply the deficiency; while on rich lands, thin sowing is advisable, since the numerous shoots from each single plant will cause the grain to stand thick enough, though the quantity of seed be small. We must take leave to differ in part from this view. If wheat does not tiller much on a poor soil, it is because there is not sufficient nourishment within reach of the roots to make it; and if the pasture of the roots is contracted by other plants crowded near, the nourishment will be proportionably diminished. Hence will ensue short straw and short heads, and the product will be actually less, than if less seed had been applied. With very fertile lands, a small quantity of seed certainly suffices to produce a sufficiently thick stand: but the growth is apt to be too rank, and some propose to diminish this by sowing very thick, as was practiced by our correspondent D. in the experiment given in our last number. The object aimed at would no doubt be accomplished in this way,—but whether it would not be at the hazard of a growth so slender as to be liable to be laid, is a matter to be considered. In the case of our correspondent, it seems to have resulted well. He sowed upwards of 6 pecks to the acre, early in September, which, on the virgin soil of the timbered lands, produced, of course, a dense stand of straw. In his opinion, this thick sowing tended to prevent rust: and, we find in an old English publication, called "*Dickson's Practical Agriculture*," published 40 years ago, the position laid down, "when lands have a known disposition to mildew, a larger pro-

portion of seed than usual, should be given." The reason for this counsel is not assigned.

We have ever been at a loss to account for the great success of the English practice in applying from 2 to 3½ bushels of seed to the acre, on lands rich enough to yield 50 or 60 bushels on the same surface, and that, too, in a humid climate, which, it might be supposed, exposed peculiarly to rust. Why such a vast disparity in the practice of this country and that should be necessary, is not apparent, except so far as their greater depth and thoroughness of cultivation admits it, by enabling the roots to seek their nourishment downward, if they cannot laterally. It is, no doubt, a fact that thicker sowing is admissible on soils of deep tilth, than of shallow. It is proper to mention, however, that there is a tendency among English farmers, at the present day, to some reduction in the quantity of seed; and if our wheat-growers should approximate a little towards the practice of their transatlantic brethren of the plow, the principle of reciprocity and mutual concession might, perchance, apply quite as advantageously in the matter of raising wheat, as in raising revenue.

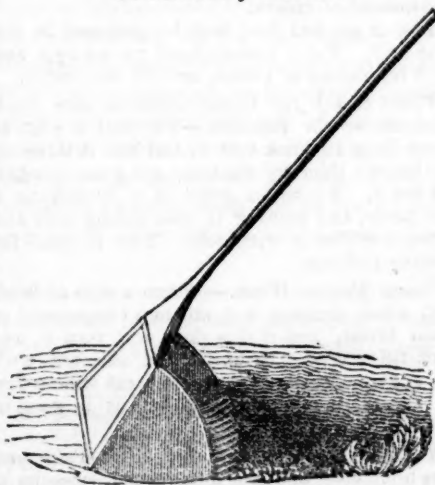
CONDITIONS OF SOWING, &c.—The state of the soil most desirable is that when it is neither wet nor dry, but moist. Of the two extremes, that of dryness is doubtless least injurious. There appear to be well authenticated cases of smut being produced by putting in wheat when the soil was wet and adhesive:—cases in which wheat in the same field, was harrowed in, a part before, and a part during, or directly after a heavy rain; the former was healthy, and the latter badly affected by smut. The general rule, that it is injurious to stir land when wet, applies, undoubtedly, to the process of getting in wheat.

As to the depth to which seed wheat should be buried, this depends somewhat upon the depth of tilth which has been previously given: as there should, at all events, be several inches of mellow, cultivated soil below the seed. On the other hand, the seed should be buried sufficiently deep, to be defended from the contingency of drouth. When the soil has been cultivated to the requisite depth, from two to three inches is probably the most desirable depth, and this is about the depth commonly given by the cultivator, which is probably the best implement in use for covering wheat. The common plow is apt to go too deep, to bury too unequally, and leave the land in too rough a state.

On all but heavy soils, it is of great advantage to complete the operation of seeding, by following with the roller.

LAYING DOWN TO CLOVER WITH WHEAT.—So far as our observation or experience have gone, it is much safer to sow clover with an early sown crop of wheat in the fall, harrowing in the seed, than to defer it till spring. The danger of the destruction of the young growth in the latter case, during the early drouths of the warm season, is believed to be much greater than that of the loss of the seed in the former by winter-killing. Stocking down to clover in any way, however, with a crop of winter wheat, is no favorite method with us, as applied to the climate and most of the soils of Michigan.

Cranberry Rake.



An excellent article for gathering cranberries, and saves the labor of many persons. After raking, the berries are laid in the sun until the chaff is dry, and winnowed as grain.

GRAPE CULTURE.—I have heard a number of people say, that the reason why they did not cultivate the grape in this part of the country, was on account of the uncertainty of its crop. Now I have proved by experience, that the grape can be cultivated in this northern latitude, and produce an abundant crop every year. The operation is simply this: If it so happens that the frost kills the grapes in the spring, take a sharp knife and with it divide the growth of the present spring from that of the former year, close to the old wood, and as soon as they recover from the shock of the frost, they will again produce buds, branches, and grapes, my vines in the spring of 1845 had bloomed and set their grapes and the frost killed them. I performed the operation above named upon them, and the result was an abundant crop of grapes.

J. P. A.

Springfield, Ia., 1846.

—*Western Farmer and Gardener.*

TO SWEETEN SALT PORK.—Cut it into slices fit for frying, and put it into sweet milk over night. In the morning it will have much of the sweetness as well as freshness of unsalted pork.

Domestic Economy.

We take the following. "Receipts for food and drinks for the sick" from a new work—"Miss Beecher's Domestic Receipt Book"—the best thing on the subject of housewifery, (they say,) that has ever appeared. All the receipts profess to have been tested by superior housekeepers, and found to be the best.

An Excellent Relish for a Convalescent.—Cut some codfish to bits the size of a pea, and boil it a minute in water to freshen it. Pour off all the water, and add some cream and a little pepper.

Split and toast a Boston cracker, and put the above upon it. Milk with a little butter may be used instead of cream.

Ham or smoked beef may be prepared in the same way. For a variety, beat up an egg and stir it in, instead of cream, or with the cream.

Wheat Gruel for Young Children with weak stomachs, or for Invalids.—Tie half a pint of wheat flour in thick cotton, and boil it three or four hours; then dry the lump and grate it when you use it. Prepare a gruel of it by making a thin paste, and pouring it into boiling milk and water, and flavor with salt. This is good for teething children.

Cream Tartar Whey.—Warm a pint of fresh milk, when scalding hot, stir in a teaspoonful of cream tartar, and if this does not turn it, add more, till it does. Strain it, and sweeten with loaf sugar. Those who cannot eat wine whey can eat this without trouble, and it is good in fevers.

A great Favorite with Invalids.—Take one third brick cider and two thirds water, sweeten it, and crumb in toasted bread, or toasted crackers, and grate on nutmeg. Acid jellies will answer for this, when cider cannot be obtained.

Buttermilk Whey.—One quart of good buttermilk. When boiling, beat up the yolk of an egg, and stir in, and, if it can be allowed, some thick cream, or a little butter. Then beat the white to a stiff froth and stir in. Sugar and spice if liked.

Egg Tea and Egg Coffee (very fine).—Beat the yolk of an egg with a great spoonful of sugar, and put it to a tea-cup of cold tea or cold coffee. Add a half a tea-cup of water, cold in summer and boiling in winter, and as much cream. Then whip the white of the egg to a stiff froth and stir it in. It is very much relished by invalids.

Cranberry Tea.—Wash ripe cranberries, mash them, pour boiling water on them, and then strain off the water and sweeten it, and grate on nutmeg.

Grafting Grape Vines.

Another correspondent inquires about grafting grape vines, and as I have had some experience in that also, I will give it, and think I can convince him that it requires no great skill or nicety. In January, 1844, I was setting out foreign vines in a green-house, and thinking I might gain time by

grafting, I went into my vineyard and selected twelve Isabella vines of not less than an inch in diameter at the surface of the ground. These I took up with the greatest care and planted just in front of my green-house. I then carried the stems through the foundation and cut them off inside, about three inches under ground; split them and inserted two scions in each. I did not bind them, but simply pressed the earth tightly about them, and every one took. They showed plenty of fruit the next year; but I only allowed them to bear a few bunches, which they ripened well. This year they are growing with wonderful vigor, and are covered with fine bunches of grapes, while the young vines planted at the same time will not be ready to bear these two years. Since then I have grafted vines in every month from February till June, and with equal success, and therefore conclude that if grafted under ground there need be no difficulty about it.

H. W. S. C.

Oatlands, Burlington, N. J., May 20, 1846.

—Cultivator.

Weather Predictions.

The London *Gardeners' Chronicle* furnishes an extract from an article written by the celebrated astronomer, M. ARAGO, in which he states that he has "frequently been led to consider whether it will ever be possible, by means of astronomical calculations, to determine, a year in advance, what in any given place will be the annual temperature, that of each month, the quantity of rain, or the prevailing winds." The results of these investigations, he observes, "demonstrate peremptorily that the lunar and cometary influences are scarcely sensible; and therefore that weather prophecy can never be a branch of astronomy, properly so called. For, in fact, our satellite and the comets, have been in all times considered, in meteorology, as the preponderating stars." He protests "loudly" against those predictions which are yearly laid before the public in his name, and says: "No word has ever issued from my mouth, either in the intimacy of private conversation, or in my courses delivered during thirty years—no line has ever been published with my assent, which could authorise the attribution to me of an opinion, that it is possible, in the present state of our knowledge, to foretell with certainty what the weather will be a YEAR, a MONTH, a WEEK—nay, I will say, a SINGLE DAY, in advance."

Such, then, are the conclusions of the greatest astronomer of the age, in regard to weather-prophecy. What will our weather-wise (!) almanac makers say to them?—Cultivator.

FRUIT TREES.—At a late meeting in Boston, John Owen of Cambridge, stated he cured the black wart on plum trees by cutting off and washing in salt water; and in another case, by washing with salt water only, the warts cracking off. S. Pond learned the value of salt for plum trees, by an inundation covering his grounds several feet with salt water, "killing every thing but his plum trees, and giving them new life, health, and vigor." Dr. Shurtleff, of Brooklyn, applied to unhealthy, unproductive plum trees, two quarts

of salt each, in water; "the trees became healthy, and the ensuing season they bore much fruit." He continued the application, and was not troubled with black wart nor canker.

W. Buckminster said he had found roots of apple trees three rods from the trunk, that had been set out only sixteen years—a proof of the importance of a wide, deep bed of fertile soil.—*Cultivator.*

For the Michigan Farmer.

Experiment in Wheat Growing— Thick Sowing, &c.

MR. EDITOR,—

Every thing that will throw light on the subject of growing wheat, is read with interest and studied with profit by the farmer. I do not expect to throw light on any subject; but in order to get information with regard to this great staple of our state, I will mention some facts which have fallen under my own eye this season. I take this method in order to ask some questions in hopes of getting some answers through your columns.

My land is new, cleared last season, having a thick undergrowth, of which hazelbush was the principal portion that needed to be cleared. I plowed once the latter part of August, applied the harrow thoroughly, and sowed on the wheat at the rate of two bushels to the acre, the first week in September. My sheep ran upon the wheat from about the middle of November until the first week in April, and it was fed very short. At harvest I found the ears or heads all so even,—so nearly of a height, that one foot from the tops would have taken the whole crop. There were no late shoots which were smothered by the early ones, but all attained nearly the same height. My wheat escaped the rust, and was much better than on my neighbors' ground side by side, differing only two weeks in sowing and not fed.

I said my wheat escaped the rust: about one-half of the outside, or first swath around the field would have taken all that was affected with the rust enough to color our clothes in cradling or binding. I noticed this, and stopped to examine. I found that, from some cause, either the outside did not get covered and was thinned out by fowls, or some other cause, it was not half as thick; the stalks were much larger, had grown more rapidly, and the outside swath, one half of it, was *very rusty*; while the other half, where it stood thick, escaped, and the balance of the field was as free from rust, and as clean, bright straw, as I ever harvested. The grain was small, but not shrunk or shrivelled.

Having stated the facts, the way is prepared to make the inquiries I wish. 1st. Did the short feeding injure or benefit the crop? 2d. Did the thick sowing have any thing to do in preventing the rust? 3d. Was it the rust that shortened the crop, or was it the excessive drouth when the wheat was in bloom, and which continued until the berry was formed, that did the injury?

If the above facts and inquiries will draw out any information with regard to this bread-bearing plant, I shall be glad to get it.

Yours, with great respect,

LEANDER SACKETT.

East-Raisinville, August 16th, 1846.

REMARKS.—By some freak of the mails, the above communication did not reach us until our paper was made up; but its subject is of such practical importance, that we have made room for it. We lack space, if we had ability, to answer the interrogatories fully; but will say, in brief, that in regard to the first question, we suppose short feeding diminishes the growth; but on rich soils, and early sown crops, we conceive it is not injurious, and in some cases is beneficial, provided the feeding is begun late, is not continued when the ground is in a condition to be poached, and is not *too* short. To the second question, Mr. Sackett will see, by reading our article on "Getting in Wheat," that we lean to an affirmative answer,—and this experiment strengthens that position. Of the third inquiry, we are not sure that we rightly apprehend the meaning. Was it your own crop, or the crop in general, which you speak of the rust shortening? In yours, we understand you to say there was no rust, except at the edges. And was the "injury" referred to, the small size of the kernel in your crop? for except this you do not mention any.

We join our correspondent in hoping that the facts stated, and inquiries thereupon proposed, will elicit the experience of other wheat-growers.

—Ed.

SUCCESSION OF APPLES.—An eminent cultivator of fruit near Boston, gives the following as a good list for a succession, commencing with the earliest:—Heath's Early Nonsuch, Early Harvest, Porter, Gravenstein, Fameuse, Greening and Baldwin, and the Russets. He also adds, as fine, Red Astracan, Williams' Favorite, St. Lawrence, White Seek-no-farther, Yellow Bell-flower, Lyscom, Canada Reinette, and Murphy. And of sweet apples, Bough, Sugar Sweet, French Sweet, Danvers' Sweet, Gardiner's Sweet, and Seaver Sweet.—*Cultivator.*

EARTHING UP POTATOES.—On this subject, Mr. C. W. Johnson says:—"I have long had doubts relative to earthing up potatoes being a beneficial practice, and now I am convinced that it is detrimental. The variety employed in my experiments was the Pink Kidney; all the sets were planted at the same time, (the first week in April,) in rows two feet apart, and eighteen inches in the rows: and were taken up September 24th, and weighed. The average of all my experiments gives exactly an increase of one-fourth in favor of not earthing up; but some of the plants gave still more, viz: as 42 lbs. is to 31½ lbs. The experiment has been made on the sixteenth of an acre of good deep loam, with a cool, moist subsoil."—*Annals of Hort.*

SAW-DUST ROUND FRUIT TREES, has been found eminently useful in keeping the ground moist in drouth, and in promoting the growth of the tree. Several bushels may be applied to a tree.—*Cult.*

Wool.

The annexed article by Hamilton Gay, Esq., on the growth, preparation, packing, &c., of American Wool for the English market, contains information which will be valuable both to the farmer and merchant. It was elicited by the following note, dated—

NEW YORK, May 16th, 1846.

DEAR SIR—You have been engaged for the year past in exporting American wools to various markets in Great Britain, and must have acquired much valuable information respecting the manner in which our wools should be prepared for those markets. Such information is much wanted by our farmers and wool dealers: for it is evident that wool is to be henceforth an important article of exportation from the United States. Allow us, then, to inquire, whether you will not do us the favor to write out your impressions for the Journal of Commerce.

We are, sir, your ob't servants,

HALE & HALLOCK.

HAMILTON GAY, Esq., 53 South street.

NEW YORK, May 16th, 1846.

MESSES. HALE & HALLOCK:

DEAR SIR—I have your favor of this day's date. Such information as I can give on the subject of your inquiry, is at your service, for the benefit of those interested.

More than one-half of all the American fleece wool exported from the United States, of the last year's clip, was owned and shipped by myself and by others having a joint interest with me. The purchases were all made at the lowest point of the season, beginning on the 1st day of September, and closing on the 25th day of October last. The result has been a net loss of \$5,993, and 188 bales of wool yet unsold; equal only to the fraction of a penny sterling on each pound. Not a fleece of the wool was sold to meet the payment of drafts drawn against it, nor was any portion of it unduly pressed upon the market—and this loss arose from causes unnecessary, easily avoided, and entirely within the control of parties in this country.

The prices of United States fleece wool are affected very injuriously in foreign markets by its unclean condition. It contains too much oil, and yolk, and dirt. The sheep are generally washed with too little care, and run too long after washing before shearing. A large portion of the wool, from this cause, must pass through the hands of those who sort it and scour it in soap and water, before it is sold to the manufacturers.

The wool itself is of superior staple, and while upon the sheep is inferior to no other in the world, of equal grade; and it may be safely stated, that every pound of oil, or other worthless substance, will, in the English markets, deduct from the value of the wool containing it, the price at least of two pounds of wool. English manufacturers and samplers, before purchasing, open a portion of the fleeces, and examine carefully, not only the fineness, but also the strength of the staple, and its condition throughout.

The first important operation in preparing our fleece wool for export, is to properly cleanse it before shearing. The sheep should be washed in clear running water—the water must run freely

through every part of the fleece, and the wool and every part of it should be pressed and worked with the hand while under water, until the dirt and oil are removed, and the water runs off clear. The shearing should then take place as soon as the sheep become dry after washing.*

Then comes the tying up of the fleeces.

All the loose locks, clippings and tags, and every thing unclean, or of an inferior quality, and the coarse wool from the thighs, if there be any, should be *wholly rejected*, and the fleeces tied up firmly, so as to keep their shape, and show, as is customary, the best part of the fleece on the outside.

This terminates the wool-grower's part; but I will here remark, that sheep should be kept as nearly as possible in uniformly good health and flesh, because every portion of the staple or fibre of the wool which grows while the sheep are very poor from disease or want of food, has so little strength as to break in working; and if this weak growth takes place in the fall of the year, it destroys the fleece for many purposes.

The next step is to properly sort and sack the fleeces, and direct them to the best market. This is the merchant's part, and more than a shipper's profit depends upon its being performed understandingly.

In England each manufacturer devotes his attention to one particular description of goods, for which his machinery has been constructed, and he makes no other. The makers of each kind of goods have established themselves mostly together in some one part of the kingdom, where they have a wool market of their own, in which they seek for the qualities and descriptions suitable for their purpose, and will buy no other. The broad-cloth makers in the West of England; the Worsted Combers of Yorkshire; the flannel manufacturers of Rochdale, and those who make hosiery in Nottingham; purchase in their several markets a supply suitable only for their own machinery. So nice does this discrimination run, that the fleeces of fine wool, taken from sheep one year old, which were never before shorn, are mostly sent to one part of the country, and there sold to be used for one purpose, and the fleeces taken from the same sheep the next year, are sent to another part of the country, and there wrought into a very different kind of goods. Thus it is of great importance that fleece wool for shipment, before it goes on board, should be sorted and sacked according to the grades of foreign manufacturers, and suitable for their purposes, in order that it may be sold *directly* to them—otherwise, even if clean and in good order, it must pass first through other hands, that re-sort it, re-sack it, and distribute it to various parts of the kingdom at considerable expense.

The size of the bales is the next thing to be kept in view. I have paid on large shipments as high as one dollar *per bale* for "Dock Dues," without reference to the size of the bales; while at some ports the charge is less than one-tenth part of this sum.

* Morrell, in his American Shepherd, directs that shearing should not take place, until the lapse of such an interval after washing, as will allow the oil to appear, and confer softness and brilliancy on the wool. A week or ten days is sufficient for this purpose, if the weather has been rainy.

Custom in England gives the purchaser an allowance on each bale called "The Draft;" but the amount thus given varies at the different markets. I have many accounts of sales in which only one pound weight *per bale* is deducted for "the draft." I have other accounts of sales made in different places, in which 2 pounds, and 3 pounds, and 4 pounds, and even 8 pounds *per bale* is deducted for "the draft," without reference to the size of the bale. This may seem unreasonable, but it is established by the ancient usage of the different markets, and must be complied with. The bales should therefore be of a size suited to their destination; but not too large, else they will not be lifted, but rolled over the docks and streets. Each sack should be firmly packed by a man inside, but never pressed by machinery, and every fleece of weak staple carefully rejected, and those fleeces packed by themselves.

The shipment then requires some attention.

The wool should be placed on board dry, with the sacking whole and clean, and should always be sent as light freight in the upper part of the vessel. Our wool contains too much oil and gummy matter to be placed low in the ship, with heavy weights pressing upon it, without being in some degree injured by matting together.

This closes the part of the American merchant.

In illustration, I will remark that I have had two invoices of wool sold in England at the same price, in the same place, and within three days of each other, whose value in this country differed ten cents per pound on the day of their purchase, or any other day since. The one kind answered the market, the other did not, but was greatly superior in fineness of fibre.

My own clip of wool, grown upon my own lands, and cut last June, and which I know all about, I shipped to England in one vessel, and consigned it, in two equal quantities, of equal quality, to two different markets, about 200 miles distant from each other, and they were sold near the same time, by direction of the same house, and after full and fair exposure in both markets, at a difference of more than seven cents per pound in price. Its quality and condition were very superior, and just suited to the one market, and not to the other.

Within the past year, I have sent more or less wool to every part of England, and to Wales, and to Scotland, comprising the various qualities grown in Illinois, Michigan, Ohio, Pennsylvania, New York and Vermont. Nearly every invoice was accompanied with an intimation that "It was not sent so much with a view to profit as to try their market, and hoping to receive in return suitable directions or suggestions for a better method for preparing and shipping such wools to England." The result has been a voluminous correspondence, giving ample details, and all the particulars required. It is from this correspondence and the results of those actual sales, as well as from personal observation and information, that I venture the opinions already expressed. I trust that the past errors may be avoided in the future: and I now have done with the preparations and shipment.

The production of wool in the United States, until recently, has not equalled the consumption; but the low price of grains and provisions since

1840, has caused a rapid increase in the number of sheep; which, under very favorable circumstances, may double each three years; and they now surpass, and are likely still further to surpass, all previous estimates. The quantity of wool became so unwieldy last year, that the value fell full twenty per cent., notwithstanding the foreign shipments, the abundance of money, the high tariff, and the prosperous condition of the manufacturing interest. We now have the promise of considerably increased quantities in this year's clip, especially from some of the new States, with money more in demand, the protective policy in more danger, and lower prices of cloths. If the home markets were solely relied upon, wool, like all other articles, when produced in excess, would long rule low in price. An abundant supply will hereafter enable manufacturers to purchase at their leisure, and to choose their qualities; and henceforth prices must be regulated, like those of cotton, in the open markets of the world. The growing of wool in this country is receiving from year to year more and more attention. Men's minds have been turned in that direction. Hundreds of thousands of sheep, instead of being slaughtered as formerly, are now annually driven from older and cultivated lands, as fast as their increase exceeds their pasturage, to newer grounds, where they are distributed to emigrants from the older States accustomed to take care of them, and there they form the germs of other flocks growing up in millions. An impetus has thus been given which must long continue, because consistent with the interests of those concerned. The room and the inducements are sufficient. In the North West, between the Alleghany and the Rocky Mountains, we have a vast region stretching over the extent of empires, where the soil is composed mostly of vegetable mould, the accumulating deposit of various herbage from year to year since the creation. The earth contains nothing approaching it in vastness and fertility. This deposit is a mine of material which may be turned into wheat, only by planting wheat upon it, or into wool only by pasturing sheep upon it. It lies open to every hand that will partake of it. Its position is secure from the desolation of wars. Its extent and quantity are such that it must pass to other generations of men before exhausted. But like all great tracts of interior territory, the transportation of its products to the ocean, and the markets of other climates, is laborious, costly, slow, hazardous and uncertain. Wool forms the only exception. Wool, which is worth ten times as much as iron of equal weight, may be sent forward from the place of its growth thirty times cheaper than wheat of equal value. The necessities of densely peopled countries insure its steady consumption. Of all the articles of commerce, wool is the most stable in its nature, and has always been the most generally used by civilized man, from times the most remote of every nation, tongue and race. Of all the staple articles of the world, wool requires the least labor to produce it, the least care and cost in its preservation and transportation, and is the most suitable, profitable and reliable production for the great interior of this country, where labor is scarce and dear, and fertile lands cheap and plenty. Hence its growth

will long continue to be a cherished interest, and the export demand, at the prices of other countries, will last forever.

I remain, yours truly,
HAMILTON GAY.

The Horse.

I will state a few things which I have learned, and they may be of benefit to some of your readers. A horse that is driven on hard roads is liable to get stiff in his joints. In 1833 I had an animal, after driving three or four days, to get quite lame. An old Baltimore teamster told me to wash the mare's legs with a tolerable strong salt brine, which was done accordingly three times a day for at least a week, and once a day the balance of the journey. The stiffness disappeared in a few days, and I drove the mare 1400 miles afterward, and there was no more trouble on that account. -- What pleased me most was, the mare had a very poor foot to hold a shoe, when I started. It was very brittle and hard; it would break out when a nail was drove in, but it grew tougher at every succeeding shoeing. A smith in New England remarked to me that her foot had a singular appearance; when he pared it it was soft and tough. I account for it in this way: Salt will attract moisture from the atmosphere, which keeps the foot moist all the time; and salt has nearly the same effect that grease has on the foot or a piece of timber. The drippings from salt on a floor, if continued long, cannot be got off; the wood becomes moist and tough; and so with a horse's foot. After washing the legs turn up the horse's foot; clean the bottom; pour the hollow full of brine; hold for a few minutes to soak the bottom. The plan of rasping the foot all over to toughen it, is abominable. —
Cor. Farm. & Gard.

SWEET-SCENTED VERNAL GRASS.—We have procured from the obliging editor of the Philadelphia Farmer's Cabinet, a small quantity of the seed of this savory grass, for experiment upon some good moist soil. Who wants it, and will give it a fair trial?

SOAKING CORN.—A successful farmer effects a saving of a third to one-half by soaking his corn fed to horses in water, in barrels placed in the cellar, where it cannot freeze. —*Cultivator.*

VALUABLE TO FARMERS.

THE subscriber would hereby say to the good people of Michigan, that he is prepared to furnish (on short notice,) those who wish, with a patent machine for the purpose of smoothing, cutting and leveling, or turving entirely, swamps and marshes.

The subscriber is also prepared to sell town and county rights on liberal terms. This machine works to the entire satisfaction of all who have seen its operation. Two yoke of oxen are sufficient to prepare as many acres of marsh for the cultivated grasses, as they will harrow once over in the same time.

Farmers owning marshes are requested to call at the residence of the subscriber in the rear of the Baptist Meeting-house, and examine the machine for themselves.

H. L. FREEMAN.

Jackson, Michigan, August 29, 1846.

LAND AGENCY,

JACKSON, MICH.

Office in the 2nd story, Brick block, adjoining the American Hotel.

THE subscribers, under the name of Hurlbut & Treadwell, have established an Agency at Jackson, Michigan, for the purpose of transacting business as General Land Agents, and will personally attend

To the purchase and sale of Real Estate of all descriptions, to the payment of Taxes, redemption of lands sold for Taxes, Examination of titles, Conveyancing,

and such other business as pertains to a general real estate Agency.

Persons having farms, or lands to dispose of in any part of the State, especially in Jackson or adjoining counties, will find it for their interest to furnish us with a particular description of the same, and the terms of purchase, as arrangements have been made with Eastern Agencies through which owners desirous of disposing of such property may be materially benefitted.

Purchasers also are invited to favor our agency. No charge will in such cases be made, except where a sale is effected, when a commission of 2 per cent. is expected; and our charges shall in all instances be satisfactory.

A Catalogue of lands for sale will be published and extensively circulated by our office, and owners of Farms and other real property desiring to find purchasers, can for a reasonable consideration, avail themselves of this medium, by forwarding to us an accurate description of the property, its value, location, soil, improvements, &c., with the price and terms on which a purchase may be made, and the sum of one dollar for advertising each description. All letters must be post paid.

H. HURLBUT,
J. M. TREADWELL.

Jackson, September 1st, 1846.

Two or three improved farms are now wanted in the vicinity of Jackson.

STRAYED OR STOLEN,



FROM the subscriber, on the 7th day of June last, a tall, long-bodied, sorrel gelding horse, nine or ten years old, with a switch tail, a white stripe in the face, small white spots under the belly, white spots on the upper part of the shoulders, caused by the collar high on the withers from which his neck rather drops, called by some a collar drop. When he went away, had an old leather strap round his neck, and tied down with a small rope, shod before with new shoes, and no shoes on behind. Whoever will return said horse to the subscriber, in Henrietta, Jackson County, shall be entitled to ten dollars reward, and all reasonable charges paid; or a liberal reward for any information, either to the subscriber, or the Editor of the Michigan Farmer, where said horse can be found.

ALFRED HALL.

Henrietta, September 1st, 1846

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MICHIGAN FARMER.

TERMS FOR VOL. IV.

During the ensuing year, all subscriptions will commence with the volume. The price of a single copy is fifty cents. To clubs, a reduction is made, namely, five copies for \$2, eight copies for \$3; and in this proportion for any larger number. No reduction allowed unless payment be made in advance.

To former subscribers, and to all others who may be vouched for by any resident agent, the paper will be sent on a credit till October next. To all demands remaining unpaid on the 1st of January next, an addition of 25 per cent. will be made.

STOREY & CHENEY, Book & Job Printers, Jackson, Mich.